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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/624,442	. 07/22/2003	Brian D. Morrison	07206/084001 6413	
7590 01/22/2008 JOHN A. MOLNAR, JR. PARKER-HANNIFIN CORPORATIOŅ			EXAMINER	
			VO, HIEN XUAN	
	6035 PARKLAND BOULEVARD CLEVELAND, OH 44124-4141		ART UNIT	PAPER NUMBER
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			01/22/2008	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

	Application No.	Applicant(s)				
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Office Action Summary	10/624,442	MORRISON ET AL.				
Office Action Gainmary	Examiner	Art Unit				
The MAILING DATE of this communication app	Hien X. Vo	2863				
Period for Reply	ears on the cover sheet with the c	orrespondence address				
A SHORTENED STATUTORY PERIOD FOR REPLY WHICHEVER IS LONGER, FROM THE MAILING DA  - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication.  - If NO period for reply is specified above, the maximum statutory period w  - Failure to reply within the set or extended period for reply will, by statute, Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	ATE OF THIS COMMUNICATION 36(a). In no event, however, may a reply be tim vill apply and will expire SIX (6) MONTHS from cause the application to become ABANDONE	lely filed the mailing date of this communication. D (35 U.S.C. § 133).				
Status						
1) Responsive to communication(s) filed on 24 Ma	<u>ay 2005</u> .					
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closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.						
Disposition of Claims						
4)⊠ Claim(s) <u>1-20,22-25 and 27-35</u> is/are pending in the application.						
4a) Of the above claim(s) is/are withdrawn from consideration.						
5) Claim(s) is/are allowed.						
·	Claim(s) <u>1-20,22-25 and 27-35</u> is/are rejected.					
· -	Claim(s) <u>16</u> is/are objected to.					
8) Claim(s) are subject to restriction and/or election requirement.						
Application Papers						
9)☐ The specification is objected to by the Examiner.						
10)⊠ The drawing(s) filed on <u>22 July 2003</u> is/are: a)⊠ accepted or b)□ objected to by the Examiner.						
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).						
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).						
11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.						
Priority under 35 U.S.C. § 119						
<ul> <li>12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).</li> <li>a) ☐ All b) ☐ Some * c) ☐ None of:</li> <li>1. ☐ Certified copies of the priority documents have been received.</li> </ul>						
2. Certified copies of the priority documents have been received in Application No						
3. Copies of the certified copies of the prior		ed in this National Stage				
application from the International Bureau	• • • • • • • • • • • • • • • • • • • •					
* See the attached detailed Office action for a list of the certified copies not received.						
Attachment(s)	<b></b>					
1) Notice of References Cited (PTO-892)  4) Interview Summary (PTO-413)  2) Notice of Draftsperson's Patent Drawing Review (PTO-948)  Paper No(s)/Mail Date						
Information Disclosure Statement(s) (PTO/SB/08)   5) Notice of Informal Patent Application   Paper No(s)/Mail Date   6) Other:						
Paper No(s)/Mail Date	o) [_] Other:					

### Page 2

#### **DETAILED ACTION**

#### Claim Objections

1. Claims 16 objected to because of the following informalities: the claim is incompleted and not ending by the period.

The claims 21 and 26 are missing. Appropriate correction is required.

#### **Double Patenting**

1. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

2. Claims 1-20, 22-25, 27-35 rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-33 of U.S. Patent No. 6,600,972.

Page 3

## Application/Control Number:

10/624,442 Art Unit: 2863

### Application Ser. No. 10/624,442

#### Patent No. 6,600,972

- A system comprising:
   an electro-statically shielded enclosure,
   at least one processor external to the enclosure,
   at least one processor disposed in the enclosure, and,
   at least one dielectric media to couple the at least one processor
   external to the enclosure and the at least one processor disposed
   in the enclosure.
- 2. A system according to claim 1, further including: at least one energy source external to the enclosure, at least one power supply disposed in the enclosure, at least one dielectric media to couple the energy source external to the enclosure and the at least one power supply disposed in the enclosure.
- 3. A system according to claim 2, wherein the at least one power supply disposed in the enclosure is in communications with the at least one processor disposed in the enclosure.
- 4. A system according to claim 2, wherein the at least one energy source is a laser.
- A system according to claim 2, wherein the at least one power supply disposed in the enclosure is a laser energy power converter.
- 6. A system according to claim 2, wherein the at least one dielectric media to couple the at least one energy source external to the enclosure and the at least one power supply disposed in the enclosure includes a fiber optic cable.
- 7. A system according to claim 1, wherein the at least one dielectric media to couple the at least one processor external to the enclosure and the at least one processor disposed in the enclosure includes a fiber optic cable.
- 8. A system according to claim 1, wherein the at least one processor disposed in the enclosure includes at least one of a media access controller, a network processor, and an applications processor.
- 9. A system according to claim 1, further including a transceiver disposed in the enclosure, the transceiver in communications with the at least one processor disposed in the enclosure.
- 10. A system according to claim 1, further including at least one photo-diode to interface between the at least one processor external to the enclosure and the at least one processor disposed in the enclosure.
- 11. A system according to claim 2, further including a power monitor disposed in the enclosure, the power monitor in communications with the at least one processor disposed in the enclosure, and the power monitor in communications with the power supply disposed in the enclosure.
- 12. A system according to claim 1, further including a first connector and a second connector, wherein the first connector and the second connector are mated, and wherein the first

- A system comprising:
   an electro-statically shielded enclosure,
   at least one processor external to the enclosure,
   at least one processor disposed in the enclosure, and,
   at least one dielectric media to couple the at least one
   processor external to the enclosure and the at least one
   processor disposed in the enclosure.
- 2. A system according to claim 1, further including: at least one energy source external to the enclosure, at least one power supply disposed in the enclosure, at least one dielectric media to couple the energy source external to the enclosure and the at least one power supply disposed in the enclosure.
- 3. A system according to claim 2, wherein the at least one power supply disposed in the enclosure is in communications with the at least one processor disposed in the enclosure.
- 4. A system according to claim 2, wherein the at least one energy source is a laser.
- 5. A system according to claim 2, wherein the at least one power supply disposed in the enclosure is a laser energy power converter.
- 6. A system according to claim 2, wherein the at least one dielectric media to couple the at least one energy source external to the enclosure and the at least one power supply disposed in the enclosure includes a fiber optic cable.
- 11. A system according to claim 1, wherein the at least on electric media to couple the at least one processor external to the enclosure and the at least one processor disposed in the enclosure includes a fiber optic cable.
- 8. A system according to claim 1, wherein the at least one processor disposed in the enclosure includes at least one of a media access controller, a network processor, and an applications processor.
- A system according to claim 1, further including a transceiver disposed in the enclosure, the transceiver in communications with the at least one processor disposed in the enclosure.
- 10. A system according to claim 1, further including at least one photo-diode to interface between the at least one processor external to the enclosure and the at least one processor disposed in the enclosure.
- 7. A system according to claim 2, further including a power monitor disposed in the enclosure, the power monitor in communications with the at least one processor disposed in the enclosure, and the power monitor in communications with the power supply disposed in the enclosure.
- 12. A system according to claim 1, further including a first connector and a second connector, wherein the first connector and the second connector are mated, and wherein the first connector is mourned to the enclosure, and the second

### Page 4

### Application/Control Number:

10/624,442 Art Unit: 2863

connector is mounted to the enclosure, and the second connector is mounted external to the enclosure to provide an electrical connection to a sensor.

- 13. A system according to claim 12, wherein the second connector is mounted to a fuel tank, and the sensor is a fuel sensor.
- 14. A system according to claim 12, wherein the first connector is in communications with the at least one processor disposed in the enclosure.
- 15. A system for measuring fuel, the system comprising: an electro-statically shielded enclosure, at least one processor disposed in the enclosure, a fuel tank, and, a fuel sensor in communications with the fuel tank and the at least one processor disposed in the enclosure.
- 16. A system according to claim 15, further including: a first connector mounted to the enclosure and in communications with the at least one processor disposed in the enclosure, and, a second connector mounted to the fuel tank, the second connector mated to the first connector, the second connector in communications with the fuel sensor, and,
- 17. A system according to claim 15, wherein the fuel tank is an aluminum fuel tank.
- 18. A system according to claim 15, wherein the fuel sensor includes a variable capacitance transducer.
- 19. A system according to claim 15, further including at least one power supply disposed in the enclosure.
- 20. A system according to claim 15, further including a signal conversion device to accept an input from the first connector and provide an output to the at least one processor disposed in the enclosure.
- 22. A system according to claim 15, further including: at least one processor external to the enclosure, and, at least one dielectric media to couple the processor external to the enclosure and the at least one processor disposed in the enclosure.
- 23. A system according to claim 15, further including: at least one energy source external to the enclosure, at least one power supply disposed in the enclosure, at least one dielectric media to couple the at least one energy source external to the enclosure and the at least one power supply disposed in the enclosure.
- 24. A system according to claim 23, wherein the energy source is a laser.
- 25. A system according to claim 23, wherein the at least one power supply disposed in the enclosure is a laser energy power converter.
- 27. A system according to claim 23, wherein the at least one dielectric media to couple the at least one energy source and the at least one power supply disposed in the enclosure includes a fiber optic cable.
- 28. A system according to claim 22, wherein the at least one

connector is mounted external to the enclosure to provide an electrical connection to a sensor.

- 13. A system according to claim 12, wherein the second connector is mounted to a fuel tank, and the sensor is a fuel sensor.
- 14. A system according to claim 12, wherein the first connector is in communications with the at least one processor disposed in the enclosure.
- 15. A system for measuring fuel, the system comprising: an electro-statically shielded enclosure, at least one processor disposed in the enclosure, a fuel tank, and, a fuel sensor in communications with the fuel tank and the at least one processor disposed in the enclosure.
- 16. A system according to claim 15, further including: a first connector mounted to the enclosure and in communications with the at least one processor disposed in the enclosure, and, a second connector mounted to the fuel tank, the second connector mated to the first connector, the second connector in communications with the fuel sensor.
- 20. A system according to claim 15, wherein the fuel tank is an aluminum fuel tank.
- 18. A system according to claim 15, wherein the fuel sensor includes a variable capacitance transducer.
- 19. A system according to claim 15, further including at least one power supply disposed in the enclosure.
- 17. A system according to claim 16, further including a signal conversion device to accept an input from the first connector and provide an output to the at least one processor disposed in the enclosure.
- 26. A system according to claim 15, further including: at least one processor external to the enclosure, and, at least one dielectric media to couple the processor external to the enclosure and the at least one processor disposed in the enclosure.
- 22. A system according to claim 15, further including: at least one energy source external to the enclosure, at least one power supply disposed in the enclosure, at least one dielectric media to couple the at least one energy source external to the enclosure and the at least one power supply disposed in the enclosure.
- 23. A system according to claim 22, wherein the energy source is a laser.
- 24. A system according to claim 22, wherein the at least one power supply disposed in the enclosure is a laser energy power converter.
- 25. A system according to claim 22, wherein the at least one dielectric media to couple the at least one energy source and the at least one power supply disposed in the enclosure includes a fiber optic cable.
- 27. A system according to claim 21, wherein the at least one dielectric media to couple the at least one processor and the at

### Application/Control Number:

10/624,442 Art Unit: 2863

dielectric media to couple the at least one processor and the at least one processor disposed in the enclosure includes a fiber optic cable.

- 29. A system according to claim 15, wherein the enclosure is mounted to the fuel tank.
- 30. A method for providing a measurement from a fuel tank, the method comprising:

providing an electro-statically shielded enclosure including at least one processor disposed in the enclosure,

providing at least one processor external to the enclosure, providing a fuel tank sensor in communications with the fuel tank and the at least one processor disposed in the enclosure, and, providing at least one dielectric media to couple the at least one processor external to the enclosure and the at least one processor disposed in the enclosure.

- 31. A method according to claim 30, further including: providing at least one energy source external to the enclosure, providing at least one power supply disposed in the enclosure, the at least one power supply in communications with the at least one processor disposed in the enclosure, and, providing at least one dielectric media to couple the at least one energy source and the at least one power supply disposed in the enclosure.
- 32. A method according to claim 30, wherein providing at least one dielectric media to couple the at least one processor external to the enclosure and the at least one processor disposed in the enclosure includes providing a fiber optic cable.
- 33. A method according to claim 31, wherein providing at least one dielectric media to couple the at least one energy source and the at least one power supply disposed in the enclosure includes providing a fiber optic cable.
- 34. A method according to claim 30, wherein providing a fuel tank sensor in communications with the fuel tank and the at least one processor disposed in the enclosure, includes: providing a first connector mounted to the enclosure and in

communications with the at least one processor disposed in the enclosure,

providing a second connector mounted to the fuel tank, the second connector in communications with the fuel tank sensor and the second connector mated to the first connector.

35. A method according to claim 31, further including providing a

power monitor in communications with the at least one power supply and the at least one processor disposed in the enclosure.

least one processor disposed in the enclosure includes a fiber optic cable.

- 21. A system according to claim 15, wherein the enclosure is mounted to the fuel tank.
- 28. A method for providing a measurement from a fuel tank, the method comprising:

providing an electro-statically shielded enclosure including at least one processor disposed in the enclosure, providing at least one processor external to the enclosure, providing a fuel tank sensor in communications with the fuel tank and the at least one processor disposed in the enclosure, and

providing at least one dielectric media to couple the at least one processor external to the enclosure and the at least one processor disposed in the enclosure.

- 29. A method according to claim 28, further including: providing at least one energy source external to the enclosure, providing at least one power supply disposed in the enclosure, the at least one power supply in communications with the at least one processor disposed in the enclosure, and, providing at least one dielectric media to couple the at least one energy source and the at least one power supply disposed in the enclosure.
- 33. A method according to claim 28, wherein providing at least one dielectric media to couple the at least one processor external to the enclosure and the at least one processor disposed in the enclosure includes providing a fiber optic cable.
- 30. A method according to claim 29, wherein providing at least one dielectric media to couple the at least one energy source and the at least one power supply disposed in the enclosure includes providing a fiber optic cable.
- 32. A method according to claim 28, wherein providing a fuel tank sensor in communications with the fuel tank and the at least one processor disposal in the enclosure, includes: providing a first connector mounted to the enclosure and in communications with the at least one processor disposed in the enclosure,

providing a second connector mounted to the fuel tank, the second connector in communications with the fuel tank sensor and the second connector mated to the first connector.

31. A method according to claim 29, further including providing a power monitor in communications with the at least one power supply and the at least one processor disposed in the enclosure.

Although the conflicting claims are not identical, they are not patentably distinct from each other because the subject matter claimed in the instant application is fully disclosed in the patent and is covered by the patent since the patent and the application are claiming common subject matter.

Art Unit: 2863

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hien X. Vo whose telephone number is (571) 272-2282. The examiner can normally be reached on M-F (9:00-5:30).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Barlow can be reached on (571) 272-2269. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Hien Vo 01/09/08

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